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AT169924T □ 19980915**Title:** (GER) BENZOPYRAN-DERIVATE UND IHRE VERWENDUNG**Application Number:** AT 94107334 T**Application (Filing) Date:** 19940511**Priority Data:** JP 3391194 19940303 A X; JP 11595093 19930518 A X;**Inventor(s):** SOHDA TAKASHI JP ; TAKETOMI SHIGEHISA JP ; ODA TSUNEO JP**Assignee/Applicant/Grantee:** TAKEDA CHEMICAL INDUSTRIES LTD JP**IPC (International Class):** C07F009655; A61K03166; C07F0096574; C07F0096558; C07F0096571**Other Abstracts for Family Members:** CHEMABS122(19)239954P; DERABS C94-359715

[no drawing available]

CA2123768A1 □ 19941119**Title:** (ENG) BENZOPYRAN DERIVATIVES AND THEIR USE

Abstract: This invention relates to a compound represented by the formula: wherein B represents a hydrogen atom or a lower alkyl group; ring A represents a benzene ring which may have one or more substituents; represents a single or double bond; Q1 represents the group represented by the formula, , or a hydrocarbon residue substituted with the group represented by the formula, wherein X represents a bond or a spacer having a chain length of 1 to 4 atoms as the linear moiety which may have one or more side chains; R1 and R2, whether identical or not, independently represent a hydrogen atom or a lower alkyl, or may bind together to form a ring; Q2 represents a hydrogen atom, a hydrocarbon residue which may be substituted or a heterocyclic ring residue which may be substituted; or a salt thereof.

Application Number: CA 2123768 A**Application (Filing) Date:** 19940517**Priority Data:** JP 11595093 19930518 A X; JP 3391194 19940303 A X;**Inventor(s):** SOHDA TAKASHI JP ; ODA TSUNEO JP ; TAKETOMI SHIGEHISA JP**Assignee/Applicant/Grantee:** TAKADA CHEMICAL IND LTD JP**Last Modification Date:** 20050426**IPC (International Class):** C07F009547; C07D47104; C07D48704; C07D49304; C07D40512; C07D41312; C07D41712; C07D31124; A61K03133; A61K03166**Publication Language:** ENG**DE69412538D1 □ 19980924 FullText****Title:** (GER) Benzopyran-Derivate und ihre Verwendung**Application Number:** DE 69412538 A**Application (Filing) Date:** 19940511**Priority Data:** JP 3391194 19940303 A X; JP 11595093 19930518 A X;**Inventor(s):** SOHDA TAKASHI JP ; TAKETOMI SHIGEHISA JP ; ODA TSUNEO JP**Assignee/Applicant/Grantee:** TAKEDA CHEMICAL INDUSTRIES LTD JP

Last Modification Date: 20050322**IPC (International Class):** C07F009655; A61K03166; C07F0096574; C07F0096558; C07F0096571**Other Abstracts for Family Members:** CHEMABS122(19)239954P; DERABS C94-359715**DE69412538T2** **19981224 FullText****Title:** (GER) Benzopyran-Derivate und ihre Verwendung**Application Number:** DE 69412538 T**Application (Filing) Date:** 19940511**Priority Data:** JP 3391194 19940303 A X; JP 11595093 19930518 A X;**Inventor(s):** SOHDA TAKASHI JP ; TAKETOMI SHIGEHISA JP ; ODA TSUNEO JP**Assignee/Applicant/Grantee:** TAKEDA CHEMICAL INDUSTRIES LTD JP**Last Modification Date:** 20050322**IPC (International Class):** C07F009655; A61K03166; C07F0096574; C07F0096558; C07F0096571**Other Abstracts for Family Members:** CHEMABS122(19)239954P; DERABS C94-359715**EPO Register****EP0625522A1** **19941123 FullText****Title:** (ENG) Benzopyran derivatives and their use**Abstract:** (ENG)**This invention relates to a compound represented by the formula:**

wherein B represents a hydrogen atom or a lower alkyl group; ring A represents a benzene ring which may have one or more substituents; represents a single or double bond; Q₁ represents the group represented by the formula, , or a hydrocarbon residue substituted with the group represented by the formula, wherein X represents a bond or a spacer having a chain length of 1 to 4 atoms as the linear moiety which may have one or more side chains; R¹ and R², whether identical or not, independently represent a hydrogen atom or a lower alkyl, or may bind together to form a ring; Q₂ represents a hydrogen atom, a hydrocarbon residue which may be substituted or a heterocyclic ring residue which may be substituted; or a salt thereof.

Application Number: EP 94107334 A**Application (Filing) Date:** 19940511**Priority Data:** JP 3391194 19940303 A I; JP 11595093 19930518 A I;**Inventor(s):** SOHDA TAKASHI JP ; TAKETOMI SHIGEHISA JP ; ODA TSUNEO JP**Assignee/Applicant/Grantee:** TAKEDA CHEMICAL INDUSTRIES LTD JP**Last Modification Date:** 20050412**IPC (International Class):** C07F009655; A61K03166; C07F0096574; C07F0096558; C07F0096571**ECLA (European Class):** C07F009655P60; C07F0096558C; C07F0096571L4**Designated Countries:**

- Designated States: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

Publication Language: ENG**Agent(s):** von Kreisler, Alek, Dipl.-Chem. et al 00012437 Patentanwaelte, von Kreisler-Selting-Werner, Bahnhofsvorplatz 1 (Deichmannhaus) 50667 Koeln DE**Patents Cited:**

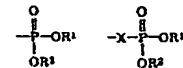
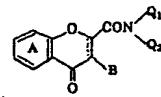
- WO9203451 A A 0
- WO9206083 A A 0
- EP0524023 A AD 0

Additional Information:

- Date of request for examination 19950218
- Date of dispatch of first examination report 19970724
- Patent bulletin/ gazette information 20040922 200439
- Lapse of a Patent , 19980819 AT, 19980819 BE, 19981119 DK, 19980819 ES, 19980819 GR, 19990511 IE, 19990511 LU, 19980819 NL, 19981119 PT, 19981119 SE

EPO Register

EP0625522B1 19980819 FullText

Title: (ENG) Benzopyran derivatives and their use**Abstract:** (ENG)

This invention relates to a compound represented by the formula:

wherein B represents a hydrogen atom or a lower alkyl group; ring A represents a benzene ring which may have one or more substituents; represents a single or double bond; Q₁ represents the group represented by the formula, , or a hydrocarbon residue substituted with the group represented by the formula, wherein X represents a bond or a spacer having a chain length of 1 to 4 atoms as the linear moiety which may have one or more side chains; R¹ and R², whether identical or not, independently represent a hydrogen atom or a lower alkyl, or may bind together to form a ring; Q₂ represents a hydrogen atom, a hydrocarbon residue which may be substituted or a heterocyclic ring residue which may be substituted; or a salt thereof.

Application Number: EP 94107334 A**Application (Filing) Date:** 19940511**Priority Data:** JP 3391194 19940303 A I; JP 11595093 19930518 A I;**Inventor(s):** SOHDA TAKASHI JP ; TAKETOMI SHIGEHISA JP ; ODA TSUNEO JP**Assignee/Applicant/Grantee:** TAKEDA CHEMICAL INDUSTRIES LTD JP**Last Modification Date:** 20050412**IPC (International Class):** C07F009655; A61K03166; C07F0096574; C07F0096558; C07F0096571**ECLA (European Class):** C07F009655P60; C07F0096558C; C07F0096571L4**Designated Countries:**

- Designated States: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

Publication Language: ENG**Agent(s):** von Kreisler, Alek, Dipl.-Chem. et al 00012437 Patentanwaelte, von Kreisler-Selting-Werner, Bahnhofsvorplatz 1 (Deichmannhaus) 50667 Koeln DE**Other Abstracts for Family Members:** CHEMABS122(19)239954P; DERABS C94-359715**Patents Cited:**

- WO9203451 A A 0
- WO9206083 A A 0
- EP0524023 A AD 0

Additional Information:

- Date of request for examination 19950218
- Date of dispatch of first examination report 19970724
- Patent bulletin/ gazette information 20040922 200439
- Lapse of a Patent , 19980819 AT, 19980819 BE, 19981119 DK, 19980819 ES, 19980819 GR, 19990511 IE, 19990511 LU, 19980819 NL, 19981119 PT, 19981119 SE

[no drawing available]

FI942294A 19941119

Title: (FIN) Bentsöpyraanijohdannaiset ja niiden kaeyttoe**Application Number:** FI 942294 A**Application (Filing) Date:** 19940517**Priority Data:** JP 3391194 19940303 A X; JP 11595093 19930518 A X;**Inventor(s):** SOHDA TAKASHI JP ; TAKETOMI SHIGEHISA JP ; ODA TSUNEO JP**Assignee/Applicant/Grantee:** TAKEDA CHEMICAL INDUSTRIES LTD JP**Last Modification Date:** 20040902

IPC (International Class): C07DA**Other Abstracts for Family Members: CHEMABS122(19)239954P; DERABS C94-359715**

[no drawing available]

FI942294D0 **19940517****Title:** (FIN) Bentsopyraanijohdannaiset ja niiden kaeyttoe**Application Number:** FI 942294 A**Application (Filing) Date:** 19940517**Priority Data:** JP 3391194 19940303 A X; JP 11595093 19930518 A X;**Inventor(s):** SOHDA TAKASHI JP ; TAKETOMI SHIGEHISA JP ; ODA TSUNEO JP**Assignee/Applicant/Grantee:** TAKEDA CHEMICAL INDUSTRIES LTD JP**Last Modification Date:** 20040902**IPC (International Class): C07DA****Other Abstracts for Family Members:** CHEMABS122(19)239954P; DERABS C94-359715**JP7291983A** **19951107 FullText****Title:** (ENG) BENZOPYRAN DERIVATIVE AND MEDICINE CONTAINING THE SAME**Abstract:** (ENG)

PURPOSE: To obtain the novel compound derivative, having osteogenetic promoting actions and useful for preventing and treating, etc., metabolic osteopathy such as osteoporosis by reacting a 4- oxo-1- benzopyran-2-carboxylic acids with a specific amine compound.

CONSTITUTION: This novel benzopyran derivative is expressed by the formula I [B is H or a lower alkyl; ring A is a (substituted) benzene ring; the broken line part is a single or a double bond; Q1 is a group expressed by the formula II (R1 and R2 are each H or a lower alkyl or may mutually be bound to form a ring) or the formula III (X is a spacer having 1-4 atoms chain length); Q2 is H, a (substituted) hydrocarbon residue or a (substituted) heterocyclic residue], has promoting actions on osteogenesis and is useful for preventing and treating, etc., metabolic osteopathy such as osteoporosis [e.g. N-(diethoxyphosphorylmethylphenyl)-4-oxo-4H-1-benzopyran-2-carboxamide]. This compound is obtained by reacting a carboxylic acid expressed by the formula IV with an amine compound expressed by the formula V.

Application Number: JP 10275694 A**Application (Filing) Date:** 19940517**Priority Data:** JP 3391194 19940303 A X; JP 10275694 19940517 A X; JP 11595093 19930518 A X;**Inventor(s):** SODA TAKASHI ; TAKETOMI SHIGEHISA ; ODA TSUNEO**Assignee/Applicant/Grantee:** TAKEDA CHEMICAL INDUSTRIES LTD**IPC (International Class):** C07F009655; A61K03135; A61K031425; A61K03144; A61K031665; C07D40512; C07D41712**Other Abstracts for Family Members:** CHEMABS122(19)239954P; DERABS C94-359715

[no drawing available]

NO941832A **19941121****Title:** (NOR) Benzopyranderivater og deres anvendelse**Application Number:** NO 941832 A**Application (Filing) Date:** 19940516**Priority Data:** JP 3391194 19940303 A X; JP 11595093 19930518 A X;**Inventor(s):** SOHDA TAKASHI JP ; TAKETOMI SHIGEHISA JP ; ODA TSUNEO JP**Assignee/Applicant/Grantee:** TAKEDA CHEMICAL INDUSTRIES LTD JP

IPC (International Class): C07F00938; C07F00940; C07F009655; A61K031665**Other Abstracts for Family Members:** DERABS C94-359715

[no drawing available]

NO941832D0 ┌ **19940516****Title:** (NOR) Benzopyranderivater og deres anvendelse**Application Number:** NO 941832 A**Application (Filing) Date:** 19940516**Priority Data:** JP 3391194 19940303 A X; JP 11595093 19930518 A X;**Inventor(s):** SOHDA TAKASHI JP ; TAKETOMI SHIGEHISA JP ; ODA TSUNEO JP**Assignee/Applicant/Grantee:** TAKEDA CHEMICAL INDUSTRIES LTD JP**IPC (International Class):** C07F00938; C07F00940; C07F009655; A61K031665**Other Abstracts for Family Members:** DERABS C94-359715**US5580863A** ┌ **19961203** FullText**Title:** (ENG) Benzopyran derivatives and their use**Abstract:** (ENG)

This invention relates to a compound represented by the formula: STR1 wherein B represents a hydrogen atom or a lower alkyl group; ring A represents a benzene ring which may have one or more substituents; represents a single or double bond; Q._{sub.1} represents the group represented by the formula, STR2 or a hydrocarbon residue substituted with the group represented by the formula, STR3 wherein X represents a bond or a spacer having a chain length of 1 to 4 atoms as the linear moiety which may have one or more side chains; R._{sup.1} and R._{sup.2}, whether identical or not, independently represent a hydrogen atom or a lower alkyl, or may bind together to form a ring; Q._{sub.2} represents a hydrogen atom, a hydrocarbon residue which may be substituted or a heterocyclic ring residue which may be substituted; or a salt thereof.

Application Number: US 24263894 A**Application (Filing) Date:** 19940513**Priority Data:** JP 3391194 19940303 A A; JP 11595093 19930518 A A;**Inventor(s):** SOHDA TAKASHI JP ; TAKETOMI SHIGEHISA JP ; ODA TSUNEO JP**Assignee/Applicant/Grantee:** TAKEDA CHEMICAL INDUSTRIES LTD JP**Last Modification Date:** 20050215**IPC (International Class):** A61K031665; A61K031675; C07D31124; C07F00938**ECLA (European Class):** C07F009655P60; C07F0096558C; C07F0096571L4**US Class:** 514080; 514081; 514082; 514085; 514086; 514089; 514090; 514091; 514092; 514093; 514094; 514095; 514100; 544057; 544151; 544232; 544376; 546021; 546022; 546023; 548111; 548112; 548113; 548117; 548118; 549005; 549220**Agent(s):** Foley & Lardner**Examiner Primary:** Chan, Nicky**Other Abstracts for Family Members:** CHEMABS122(19)239954P; DERABS C94-359715**Non-Patent Citations:**

- G. P. Ellis et al., "Chromone-2-and-3-carboxylic Acids and their Derivatives", Progress in Medicinal Chemistry, vol. 9, pp. 65-117, (1973).

Patents Cited:

- EP0524023 19930100
- EP567107 19931000
- DE2125245 19711200
- JP53133635 19781100
- JP63156723 19880600
- JP63156722 19880600
- JP63156721 19880600
- JP63156720 19880600
- WO9203451 19920300
- WO9206083 19920400

US Post Issuance:

- US Expiration Date: 20041203 20050201 DUE TO FAILURE TO PAY MAINTENANCE FEES

Assignments Reported to USPTO:

Reel/Frame: 07001/0905 **Date Signed:** 19940510 **Date Recorded:** 19940513
Assignee: TAKEDA CHEMICAL INDUSTRIES, LTD. 1-1, DOSHOMACHI 4-CHOME, CHUO-KU OSAKA JAPAN 541
Assignor: ODA, TSUNEO; SOHDA, TAKASHI; TAKETOMI, SHIGEHISA
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P.O. BOX 18218 WASHINGTON, DC 20036-8218
Brief: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

Additional Information:

- Number of claims 29
- Exemplary claim number(s) 15
- National classifications searched , 514/100 , 514/80 , 514/81 , 514/82 , 514/85, 514/86 , 514/89 , 514/90 ,
514/91 , 514/92 , 514/93 , 514/94 , 514/95 , 549/220 , 549/5 , 544/57 , 544/151 , 544/232 , 544/376 , 546/21 ,
546/22 , 546/23 , 548/111 , 548/112 , 548/113 , 548/117 , 548/118

US5741784A □ **19980421 FullText****Title:** (ENG) Benzopyran derivatives and their use**Abstract:** (ENG)

This invention relates to a compound represented by the formula: STR1 wherein B represents a hydrogen atom or a lower alkyl group; ring A represents a benzene ring which may have one or more substituents; represents a single or double bond; Q.sub.1 represents the group represented by the formula, STR2 , or a hydrocarbon residue substituted with the group represented by the formula, STR3 wherein X represents a bond or a spacer having a chain length of 1 to 4 atoms as the linear moiety which may have one or more side chains; R. sup.1 and R. sup.2, whether identical or not, independently represent a hydrogen atom or a lower alkyl, or may bind together to form a ring; Q. sub.2 represents a hydrogen atom, a hydrocarbon residue which may be substituted or a heterocyclic ring residue which may be substituted; or a salt thereof.

Application Number: US 69786296 A**Application (Filing) Date:** 19960830**Priority Data:** JP 3391194 19940303 A A; JP 11595093 19930518 A A; US 24263894 19940513 A I; US 69786296 19960830 A I;**Related Application(s):** 08/242638 19940513 5580863 GRANTED**Inventor(s):** SOHDA TAKASHI JP ; TAKETOMI SHIGEHISA JP ; ODA TSUNEO JP**Assignee/Applicant/Grantee:** TAKEDA CHEMICAL INDUSTRIES LTD JP**Last Modification Date:** 20040219**IPC (International Class):** A61K031665; A61K031675**ECLA (European Class):** C07F009655P60**US Class:** 514080; 514081; 514082; 514085; 514086; 514089; 514090; 514091; 514092; 514093; 514094; 514095; 514100**Agent(s):** Foley & Lardner**Examiner Primary:** Chan, Nicky**Other Abstracts for Family Members:** CHEMABS122(19)239954P; DERABS C94-359715**Non-Patent Citations:**

- Martindale, The Extra Pharmacopoeia, 30th Ed., p. 1379-3.

Patents Cited:

- EP0524023 19930100
- EP5671207 19931000
- DE2125245 19711200
- JP53133635 19781100
- JP63156720 19880600
- JP63156721 19880600
- JP63156723 19880600
- JP63156722 19880600
- WO9203451 19920300
- WO9206083 19920400

US Post Issuance:

- US Expiration Date: 20020421 20020618 DUE TO FAILURE TO PAY MAINTENANCE FEES

Additional Information:

- Number of claims 8
- Exemplary claim number(s) 1
- National classifications searched , 514/100 , 514/95 , 514/94 , 514/93 , 514/92 , 514/91 , 514/90 , 514/89 , 514/86 , 514/85 , 514/82 , 514/81 , 514/80 , 544/232 , 544/376 , 544/151 , 544/57 , 546/21 , 546/22 , 546/23 , 548/111 , 548/112 , 548/113 , 548/117 , 548/118 , 549/220 , 549/5



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